

CLAIMS

What is claimed is:

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1. ~~An interface system for monitoring a number of channels in a~~  
communications system having at least one group of a number of nodes, each node  
having a number of channels, the interface system comprising:  
a processor electrically coupled to a local interface;  
a memory electrically coupled to the local interface;  
a display device electrically coupled to the local interface; and  
test result interface logic stored on the memory and executable by the  
processor, the test result interface logic including:  
group level display logic to generate a number of group level  
test result components on the display device that include a number of group  
parameters associated with the at least one group;  
node level display logic to generate a number of node level test  
result components on the display device that include a number of node  
parameters associated with one of the nodes; and  
channel level display logic to generate a number of channel level  
test result components on the display device that include a number of channel  
parameters associated with one of the nodes.
2. The system of claim 1, wherein the group level test result components  
further comprise a node information table listing a number of the nodes associated with  
the at least one group.
3. The system of claim 1, wherein the group level test result components  
further comprise a group total node power graph indicating a power range for a  
number of the nodes associated with the at least one group.

1           4.       The system of claim 1, wherein the group level test result components  
2 further comprise an average percent availability graph indicating a low percent  
3 availability, a high percent availability, and an average percent availability for a number  
4 of the nodes associated with the at least one group.

1           5.       The system of claim 1, wherein the node level test result components  
2 further comprise a channel plan graph that indicates a desired frequency spectrum of a  
3 respective one of the nodes, the desired frequency spectrum including at least one  
4 frequency band associated with at least one of the channels that are associated with the  
5 respective node.

1           6.       The system of claim 1, wherein the node level test result components  
2 further comprise a total node power graph indicating an amount of power associated  
3 with one of the nodes with respect to time.

1           7.       The system of claim 1, wherein the node level test result components  
2 further comprise a node spectrum scan indicating an actual frequency spectrum of one  
3 of the nodes with respect to time.

1           8.       The system of claim 1, wherein the channel level test result components  
2 further comprise a channel carrier-to-noise graph indicating a magnitude of a channel  
3 carrier-to-noise ratio of the channels associated with one of the nodes with respect to  
4 time.

1           9.       The system of claim 1, wherein the channel level test result components  
2 further comprise channel percent available graph indicating a percent availability of the  
3 channels associated with one of the nodes with respect to time.

1           10.     The system of claim 1, wherein the channel level test result components  
2 further comprise a channel average noise power graph indicating a magnitude of a  
3 channel noise power of the channels associated with one of the nodes with respect to  
4 time.

1           11.     The system of claim 1, wherein the channel level test result components  
2 further comprise a channel power graph indicating a magnitude of a channel noise  
3 power of one of the channels associated with one of the nodes with respect to time.

1           12.     The system of claim 1, wherein the channel level test result components  
2 further comprise a channel burst counter graph indicating a number of channel bursts  
3 occurring in the channels associated with one of the nodes with respect to a burst  
4 duration length.

1           13.     An interface method for monitoring a number of channels in a  
2 communications system having at least one group of a number of nodes, each node  
3 having a number of channels, the interface method comprising the steps of:  
4           generating a number of group level test result components on a display  
5 device that include a number of group parameters associated with the at least one  
6 group;  
7           generating a number of node level test result components on the display  
8 device that include a number of node parameters associated with one of the nodes; and  
9           generating a number of channel level test result components on the  
10 display device that include a number of channel parameters associated with one of the  
11 nodes.

1           14.     The method of claim 13, wherein the step of generating a number of  
2     node level test result components on the display device that include a number of node  
3     parameters associated with one of the nodes further comprises the step of generating a  
4     channel plan graph that indicates a desired frequency spectrum of a respective one of  
5     the nodes, the desired frequency spectrum including at least one frequency band  
6     associated with at least one of the channels that are associated with the respective  
7     node.

1           15.     The method of claim 13, wherein the step of generating a number of  
2     node level test result components on the display device that include a number of node  
3     parameters associated with one of the nodes further comprises the step of generating a  
4     total node power graph indicating an amount of power associated with one of the  
5     nodes with respect to time.

1           16.     The method of claim 13, wherein the step of generating a number of  
2     channel level test result components on the display device that include a number of  
3     channel parameters associated with one of the nodes further comprises the step of  
4     generating a channel carrier-to-noise graph indicating a magnitude of a channel carrier-  
5     to-noise ratio of the channels associated with one of the nodes with respect to time.

1           17.     The method of claim 13, wherein the step of generating a number of  
2     channel level test result components on the display device that include a number of  
3     channel parameters associated with one of the nodes further comprises the step of  
4     generating a channel percent available graph indicating a percent availability of the  
5     channels associated with one of the nodes with respect to time.

1           18.     The method of claim 13, wherein the step of generating a number of  
2     channel level test result components on the display device that include a number of  
3     channel parameters associated with one of the nodes further comprises the step of  
4     generating a channel average noise power graph indicating a magnitude of a channel  
5     noise power of the channels associated with one of the nodes with respect to time.

1           19.     The method of claim 13, wherein the step of generating a number of  
2 channel level test result components on the display device that include a number of  
3 channel parameters associated with one of the nodes further comprises the step of  
4 generating a channel power graph indicating a magnitude of a channel noise power of  
5 one of the channels associated with one of the nodes with respect to time.

1           20.     The method of claim 13, wherein the step of generating a number of  
2 channel level test result components on the display device that include a number of  
3 channel parameters associated with one of the nodes further comprises the step of  
4 generating a channel burst counter graph indicating a number of channel bursts  
5 occurring in the channels associated with one of the nodes with respect to a burst  
6 duration length.